

RESEARCH

Exploring Creative Energy Solutions



The Energy Initiative supports and promotes energy-related research across Duke University, connecting the university's energy research efforts with outside entities under the highest standards of intellectual rigor, transparency and objectivity. With support from the Energy Initiative, Duke's 150+ energy faculty and research staff have greatly expanded externally funded research over recent years.

Energy Research Focus Areas at Duke

Energy Materials

include new materials for solar power, new techniques for more efficient energy systems, and new applications for existing technologies.



Economics, Policy, Modeling

inform decision-makers with expertise and data from investigations in economics, law, business, psychology, diplomacy, systems modeling and more.



Data Analytics transform information from energy systems into insight to improve reliability, resiliency, environmental sustainability, productivity and affordability.



Environmental Science/Technology

efforts seek to understand and measure the environmental impact of energy production and use, and find affordable, scalable and sustainable ways to meet growing global energy demands.



EI Supports Energy Research Across Duke

Energy Research Seed Fund

awards grants to Duke faculty-led research teams to launch new energy research projects.

\$450,000 to date

**13 teams
31 faculty
6 postdocs
10+ students**



Energy Research Workshops and Seminars

convene faculty and researchers within and outside Duke to share their recent work and form new collaborations.



**13+ seminars/
workshops
per year**



Bass Connections in Energy

provides programmatic and financial research support, teaming faculty and students from across the university with visiting fellows and outside experts to respond to complex challenges.



**24 teams
over 3 years**

RESEARCH

Energy Initiative Research Projects

Energy Research Spearheaded by the Energy Initiative



Shale Public Finance

We visited every shale play in the United States to gauge the impact of shale oil and gas development and production on local government finances, and held two workshops at Duke to allow local officials and experts to compare experiences and best practices.



Global Energy Forecasts

The Energy Initiative partners with the International Energy Forum to issue reports comparing global energy forecasts that inform IEF's annual Symposium on Energy Outlooks, where various government and industry outlooks are compared and discussed.



Energy Efficiency

Duke researchers including Energy Initiative staff and Faculty Fellows are studying how behavior and decisions relating to energy efficiency are affected by product labeling, automated bill payments, environmental regulations, data on energy use and other factors.



Energy Data Analytics

The Energy Initiative is the home of Duke's new Energy Data Analytics Lab, where a range of academic and industry partners collaborate to turn massive datasets into actionable information to improve energy system performance.



Corporate, foundation and government partners including:

Sloan Foundation | Bank of America Charitable Foundation | Wells Fargo Foundation
International Energy Forum | Sunnovations Inc. | Ice Energy

For more information about working with energy researchers at the Energy Initiative and across Duke University, contact Benjamin Gibson, Assistant Director for Research Development: ben.gibson@duke.edu, 919-681-5024